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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,839	04/30/2001	Robert E. Johnson	10004559-1	3219

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

COBY, FRANTZ

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/845,839	Applicant(s) JOHNSON ET AL.	
	Examiner Frantz Coby	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)


- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2161

This is in response to Applicant's Appeal Brief filed on January 20, 2006 in which claims 1-30 are presented for examination.

In view of the Appeal Brief filed on the aforementioned , PROSECUTION IS HEREBY REOPENED. The office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

 (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Jeffrey Gaffin

Supervisory Patent Examiner

Technology Center 2100

Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

The rejection follows:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the necessary steps to arrive with method or a system for validating a storage device.

Claims 1-30 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, the independent claims 1, 21 and 29 recite the feature in the preamble a method or a system for validating a storage device. However, the claims are silent on the required or necessary steps/elements in order to arrive with a method or a system for validating a storage device.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Burton et al. U.S. Patent no. 6,393,535.

As per claims 1, 21, and 29, Burton et al. disclose a method and system for validating a storage device comprising “storing discovery information relating to a storage device” by providing a method, system and program for modifying preferred path assignments to a storage device in which the preferred path allocation of the LUNs (Logical Unit Numbers) are maintained in non-volatile storage (See Burton et al. Col. 5, lines 9-10). The Applicant indicated in Page 11 lines 6-28 that Path Status Information and Logical Unit Number information are the information discovered for the storage

device. In addition, Burton et al. discloses the claimed features of “querying said storage device for device identification information” by providing mechanism for a host to inquire for data or for the path allocation of the LUNs (See Burton et al. Col. 5, line 12. Last Burton et al. discloses the claimed limitations of “comparing at least a portion of returned device identification information to at least a portion of said stored discovery information” during the process of returning inquiry data to a host where the controllers would use the configuration data indication the preferred path assignment to update the preferred path field of the inquiry data to indicate the preferred path to the LUN (See Burton et al. Col. 5, lines 12-20).

As per claim 2, most of the limitations of this claim have been noted in the rejection of claims 1, 21, and 29. Applicant’s attention is directed to the rejection of claims 1, 21, and 29 above. In addition, Burton et al. disclose the claimed feature of “wherein said at least a portion of the said stored discovery information includes device and host bus adapter information” as a host field and controller field (See Burton et al. Figure 3, Col. 5, lines 26-43).

As per claim 3, most of the limitations of this claim have been noted in the rejection of claims 1, 21, and 29. Applicant’s attention is directed to the rejection of claims 1, 21, and 29 above. In addition, Burton et al. disclose the claimed feature of “wherein said stored discovery information is obtained through at least one small computer system interface” (Col. 4, lines 42-58).

As per claim 4, most of the limitations of this claim have been noted in the rejection of claim 2. Applicant's attention is directed to the rejection of claim 2 above. In addition, Burton et al. disclose at least one system file (See Col. 9, lines 36-54).

As per claim 5, most of the limitations of this claim have been noted in the rejection of claim 2. Applicant's attention is directed to the rejection of claim 2 above. In addition, Burton et al. disclose "wherein said stored discovery information is obtained through at least one element selected from the group consisting of: operating system kernel application programming interface call; host bus adapter device driver library application programming interface; and some combination thereof" (See figure 3 and corresponding text).

As per claim 6, most of the limitations of this claim have been noted in the rejection of claim 1. Applicant's attention is directed to the rejection of claim 1 above. In addition, Burton et al. disclose wherein said at least a portion of said returned device identification information includes Product ID, Vendor ID and Product Revision Information" Col. 5, lines 26-65).

As per claims 7-8, most of the limitations of these claims have been noted in the rejection of claim 1. Applicant's attention is directed to the rejection of claim 1 above.

In addition, Burton et al. disclose standard device inquiry information, device address information (See Burton et al. Figure 2).

As per claim 9, most of the limitations of this claim have been noted in the rejection of claim 8. Applicant's attention is directed to the rejection of claim 8 above. In addition, Burton et al. disclose "determining and comparing claimed address information" during the process of returning inquiry data to a host where the controllers would use the configuration data indication the preferred path assignment to update the preferred path field of the inquiry data to indicate the preferred path to the LUN (See Burton et al. Col. 5, lines 12-20).

As per claim 10, most of the limitations of this claim have been noted in the rejection of claim 9. Applicant's attention is directed to the rejection of claim 9 above. In addition, Burton et al. disclose flagging said stored discovery information if said determined claimed address information does not match said stored claimed address information (See Burton et al. Col. 5, line 66-Col. 6, line 60).

As per claim 11-14, most of the limitations of these claims have been noted in the rejection of claim 9. Applicant's attention is directed to the rejection of claim 9 above. In addition, Burton et al. disclose querying for serial number during the process of returning inquiry data to a host where the controllers would use the configuration data indication the preferred path assignment to update the preferred path field of the inquiry

data to indicate the preferred path to the LUN (See Burton et al. Col. 5, lines 12-20; Col. 5, line 66-Col. 6, line 60). Also see Figure 2 for storage of the Unit serial number. Querying includes at least one small computer interface inquiry (See Col. 4, lines 42-58).

As per claim 15-20, most of the limitations of these claims have been noted in the rejection of claims 11-14. Applicant's attention is directed to the rejection of claim 9 above. In addition, Burton et al. disclose deleting or updating said stored discovery information by providing mechanism for modifying the preferred path assignment (See Burton et al. Col. 7, lines 5-49); means for transmitting information to the storage management is achieved through the HUBs 10a and 10b of figure 1; storing of the information is achieved in the storage device 16 of figure 1; communicating and event requesting the addition of said returned information or an update of previous information using said returned information is achieved during the process of returning inquiry data to a host where the controllers would use the configuration data indication the preferred path assignment to update the preferred path field of the inquiry data to indicate the preferred path to the LUN (See Burton et al. Col. 5, lines 12-20). Preventing communication between a storage management system and said device (See Burton et al. col. 5, line 66-col. 7, line 3).

As per claims 22-28, all the limitations of these claims have been noted in the rejection of claims 1-21. They are therefore rejected as set forth above.

As per claim 30 most of the limitations of this claim have been noted in the rejection of claims 1, 21 and 29 above. In addition, Burton et al. provides a platform for allowing a host to inquiring during system start-up or doing a discovery polling period by providing a host device that built a LUN path table indicating preferred path information during host initialization (See Burton et al. Col. 5, lines 44-65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Christensen et al. U.S. Patent no. 5,557,482 disclosed a multipath channel apparatus and method for data storage devices and communications systems wherein a data path is selected based on errors.

Christensen et al. European Patent 0 718 842 A1 discloses an apparatus and method for data storage device and communications system with multiple parallel signal processing paths.

Chen U.S. Patent no. 6,442,556 disclosed a software package that can store files in assigned storage device.

Kern et al. U.S. Patent no. 6,393,537 disclosed a host storage management control of outboard data movement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz Coby whose telephone number is 571 272 4017. The examiner can normally be reached on Monday-Friday 9:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571 272 4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


FRANTZ COBY
PRIMARY EXAMINER

April 27, 2006.